## WHAT IS CLAIMED IS:

1. A method of transporting bifurcated voice and signaling data 5 over a network, comprising the steps of:

identifying, for each communication link to be established respective signaling data and voice data; and transmitting said signaling data via a first medium and said voice data via a second medium.

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- The method of claim 1, wherein said first medium is a 2. wireless network.
- The method of claim 1, wherein said second medium is a 15 data packet network medium.
  - The method of claim 1, further comprising the steps of: 4. communicating said \signaling data to a switch.

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The method of claim  $1 \setminus further comprising:$ 5. communicating said voice data to a switch.

The method of claim 3, wherein said voice data is subject to compression processing compatible with a wireless network.

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- The method of claim 5, wherein said step of communicating 7. is made via a base station system.
- The method of claim 5, wherein said step of communicating 8. 30 is made via a packet/circuit switch.
- The method of claim 1, wherein said steps of identifying and transmitting are performed via a Media Terminal Adapter-Cellular Transceiver (MTA-CT) having integrated MTA and CT 35 portions.

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- 10. The method of claim 1, wherein said steps of identifying and transmitting are performed via a Media Terminal Adapter-Cellular Transceiver (MTA-CT) having non-integrated MTA and CT portions.
  - 11. In a communication system for transporting bifurcated voice and signaling traffic over a network, a method comprising the steps of:
  - segregating signaling traffic and related voice traffic including information useful in establishing a communications link for transporting said voice traffic between a calling party and a called party; and

transmitting said voice traffic via said communications
15 link established by a controller, said voice traffic and said signaling traffic being carried via different communication channels.

- 12. The method of claim 11, wherein one of said communication 20 channels is a data packet network.
  - 13. The method of claim 12, wherein said voice traffic is carried by said data packet network.
- 25 14. The method of claim 13, wherein said voice traffic is subject to compression processing compatible with a wireless network.
- 30 15. The method of claim 11, wherein one of said second communication channels is a wireless network
  - 16. The method of claim 15 wherein said signaling traffic is carried by said wireless network.

- 17. The method of claim 11, wherein said controller is a switch.
- 18. The method of claim 11, wherein said signaling traffic is transmitted to said controller via a base station system.
  - 19. The method of claim 11, wherein said voice traffic is communicated to said controller via a packet/circuit switch.
- 10 20. The method of claim 11, wherein said steps of segregating and transmitting are performed via a Media Terminal Adapter-Cellular Transceiver (MTA-CT) having integrated MTA and CT portions.
- 15 21. The method of claim 11, wherein said steps of segregating and transmitting are performed via a Media Terminal Adapter-Cellular Transceiver (MTA-CT) having non-integrated MTA and CT portions.
- 20 22. The method of claim 11 further comprising the step of: switching the voice traffic to the same communication channel as the signaling traffic when loss of local power is detected.
- 25 23. In a communication system for transporting bifurcated voice and signaling traffic between a calling party and called party, a method comprising the steps of:

identifying a call request;

establishing a signaling link to a switch via a first

30 transport medium; and

establishing a voice path to said switch via a second transport medium responsive to a determination that said called party answers.

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- 24. The method of claim 23, wherein said first medium is a wireless network.
- 25. The method of claim 24, wherein signaling data is transmitted over said wireless network.
  - 26. The method of claim 23, wherein said second medium is a data packet network.
- over said data packet network.
  - 28. The method of claim 27, wherein said voice data is subject to compression processing compatible with a wireless network.
  - 29. The method of claim 23 further comprising the step of: switching the voice data to the same medium as the signaling data when loss of local power is detected.
- 20 30. The method of claim 23, wherein said steps of identifying and said first and second steps of establishing are performed via a Media Terminal Adapter-Cellular Transceiver (MTA-CT) having integrated MTA and CT portions.
- 25 31. The method of claim 23, wherein said steps of identifying and said first and second steps of establishing are performed via a Media Terminal Adapter-Cellular Transceiver (MTA-CT) having non-integrated MTA and CT portions.
- 30 32. A communications system comprising:
  - a device for providing bifurcated voice and signaling traffic over a network; and
  - a packet/circuit switch for converting data packets to circuit switched traffic.

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- 33. The communications system of claim 32, wherein said device is a Media Terminal Adapter-Cellular Transceiver (MTA-CT) having non-integrated MTA and CT portions.
- 5 34. The communications system of claim 32, wherein said device is a Media Terminal Adapter-Cellular Transceiver (MTA-CT) having integrated MTA and CT portions.
- 35. A computer readable medium storing a software program, 10 that when executed by a computer, causes the computer to perform a method comprising:

segregating signaling traffic and related voice traffic including information useful in establishing a communications link for transporting said voice traffic between a calling party and called party; and

transmitting said voice traffic via said communications link established by a controller, said voice traffic and said signaling traffic being carried via different communication channels.

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- 36. The computer readable medium of claim 35, wherein said controller is a switch.
- 37. The computer readable medium of claim 35, wherein said signaling traffic is communicated via a wireless network.
  - 38. The computer readable medium of claim 35, wherein said voice traffic is communicated via a data packet network.
- 30 39. The computer readable medium of claim 38, wherein said voice traffic is subject to compression processing compatible with a wireless network.